

CONTRACT 36 W & S

AS-BUILT

1/21 *3/10/20*

WATER AND SEWER MAIN EXTENSIONS HOWARD COUNTY METROPOLITAN COMMISSION DORSEY SUB-DISTRICT

WHITMAN, REQUARDT & ASSOCIATES
ENGINEERS
1304 ST. PAUL ST.
BALTIMORE, MARYLAND

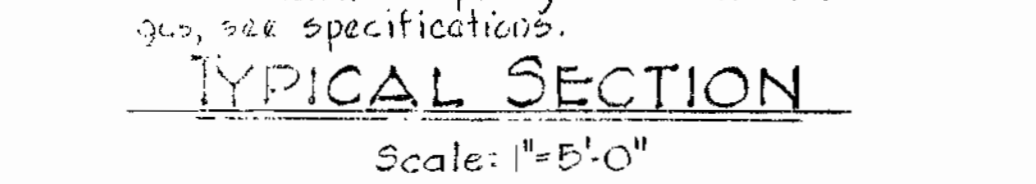
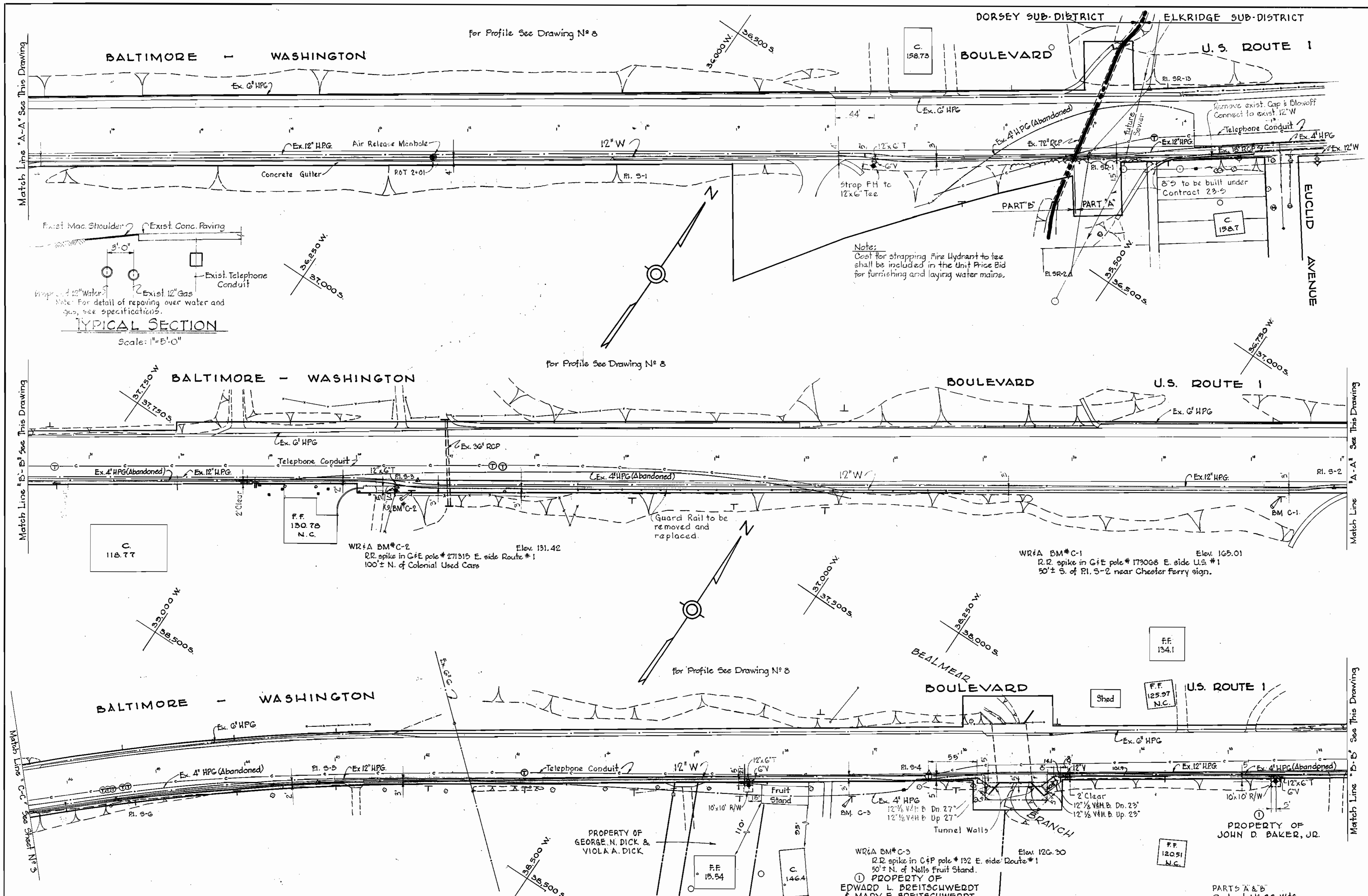
HOWARD COUNTY METROPOLITAN COMMISSION
DATE *Oct. 25, 1961*
CHIEF ENGINEER *[Signature]*

CONTRACT NO. 36-W&S

LOCATION MAP

DORSEY SUB-DISTRICT

CONTRACT N° 36-W&S
DRAWING NO. 1 OF 14
SCALE AS SHOWN



Note:
Cost for strapping Fire Hydrant to tee shall be included in the Unit Price Bid for furnishing and laying water mains.

WHITMAN, REQUARDT & ASSOCIATES
ENGINEERS
1304 ST. PAUL ST.
BALTIMORE, MARYLAND

HOWARD COUNTY METROPOLITAN COMMISSION
March 15, 1961
DATE

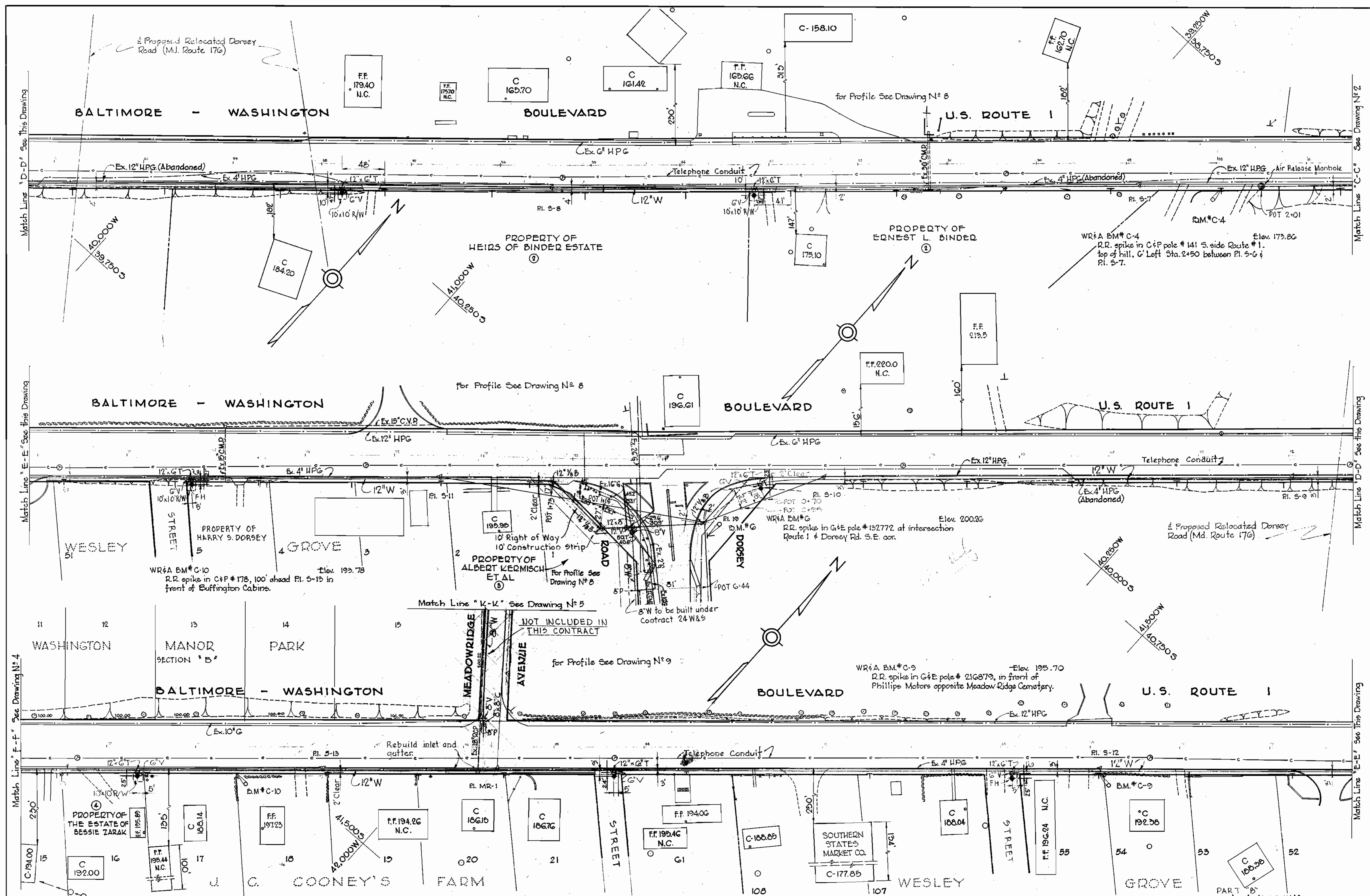
CONTRACT NO. 36-W&S

PLAN OF WATER MAINS

DORSEY SUB-DISTRICT

DRAWING NO. 2 OF 14
SCALE 1" = 50'

WS 36-W&S/2

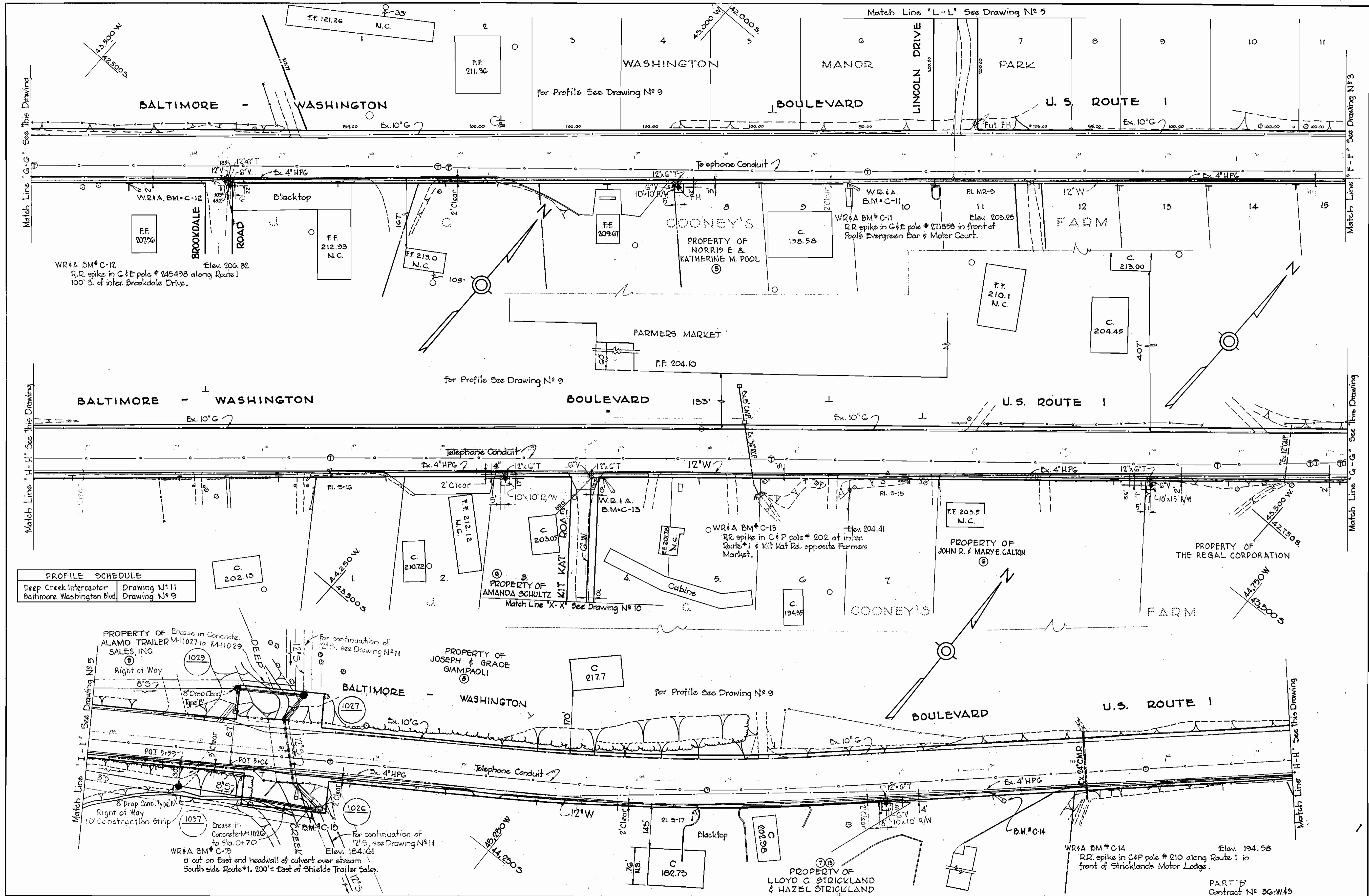


WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND	HOWARD COUNTY METROPOLITAN COMMISSION March 24, 1961 DATE	CONTRACT NO. 36-W8S	PLAN OF WATER MAINS	DORSEY SUB-DISTRICT	DRAWING NO. 3 OF 14 SCALE 1" = 50' PART 'B' Contract No. 36-W45
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W. O. 4918-2 AS BUILT Feb. 24, 1966

WS 36 W-5/3

WS 36W-S/4

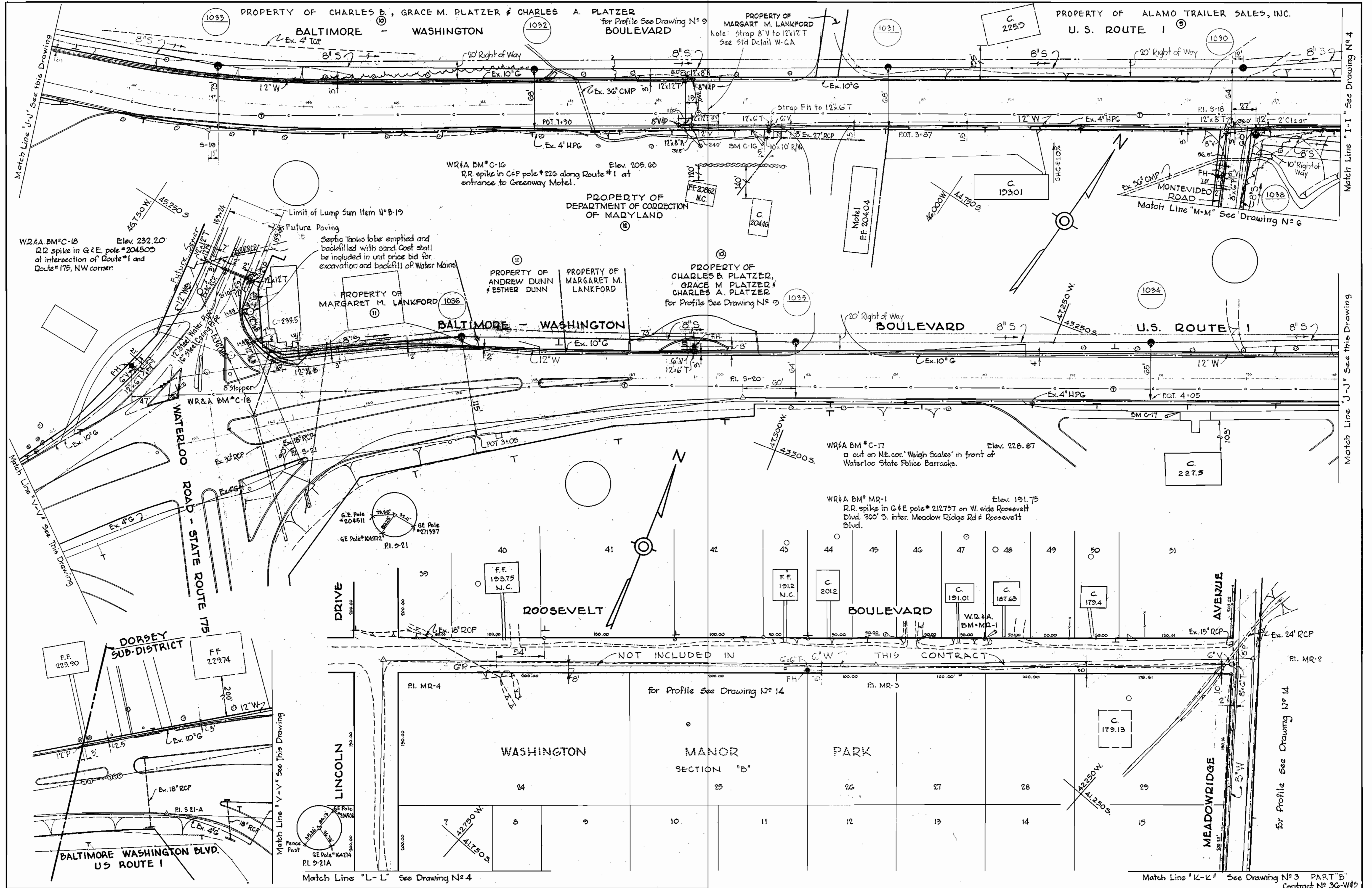


WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND	HOWARD COUNTY METROPOLITAN COMMISSION March 24, 1961 <i>Carl W. Meyer</i> CHIEF ENGINEER	CONTRACT NO. 36-W&S	PLAN OF WATER & SEWER MAINS	DORSEY SUB-DISTRICT	DRAWING NO. 4 OF 14 SCALE 1" = 50' AS BUILT Feb. 24, 1966
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W.O. 4918-2

42	50	59
43	54	58
44	51	57
45	53	56
46	52	55
47	55	51
48	56	51
49	57	51
50	58	51

WS 36 W-5/5



WHITMAN, REQUARDT & ASSOCIATES
ENGINEERS
1304 ST. PAUL ST.
BALTIMORE, MARYLAND

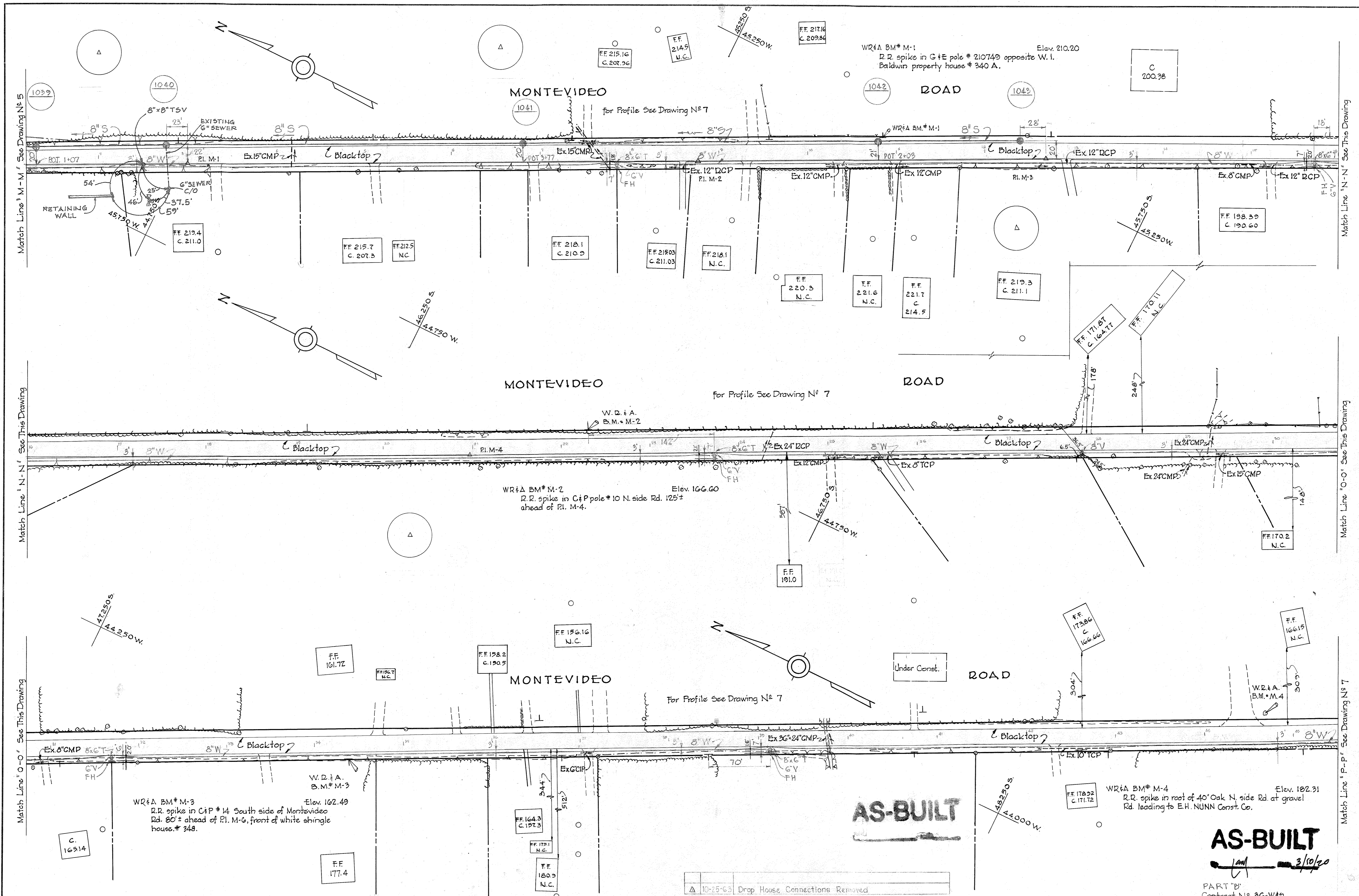
HOWARD COUNTY METROPOLITAN COMMISSION
March 24, 1961
DATE
Carl W. Meyer
CHIEF ENGINEER

CONTRACT NO. 36-W&S

PLAN OF
WATER & SEWER MAINS

DORSEY SUB-DISTRICT

DRAWING NO. 5 OF 14	SCALE 1" = 50'
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WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND	HOWARD COUNTY METROPOLITAN COMMISSION DATE: March 24, 1961 <i>Carl W. Meyer</i> CHIEF ENGINEER	CONTRACT NO. 36-W&S	PLAN OF WATER & SEWER MAINS	DORSEY SUB-DISTRICT	DRAWING NO. 6 OF 14	SCALE 1" = 50' 1/4" = 10' 1/8" = 5'
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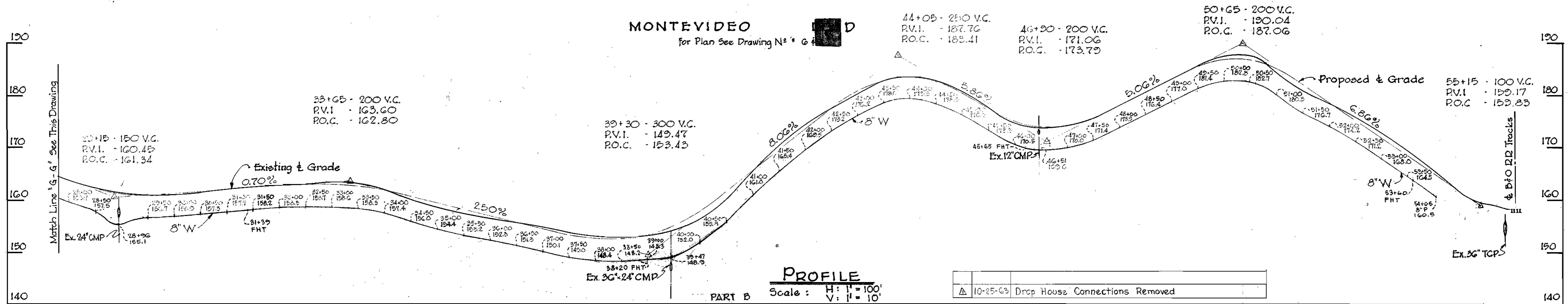
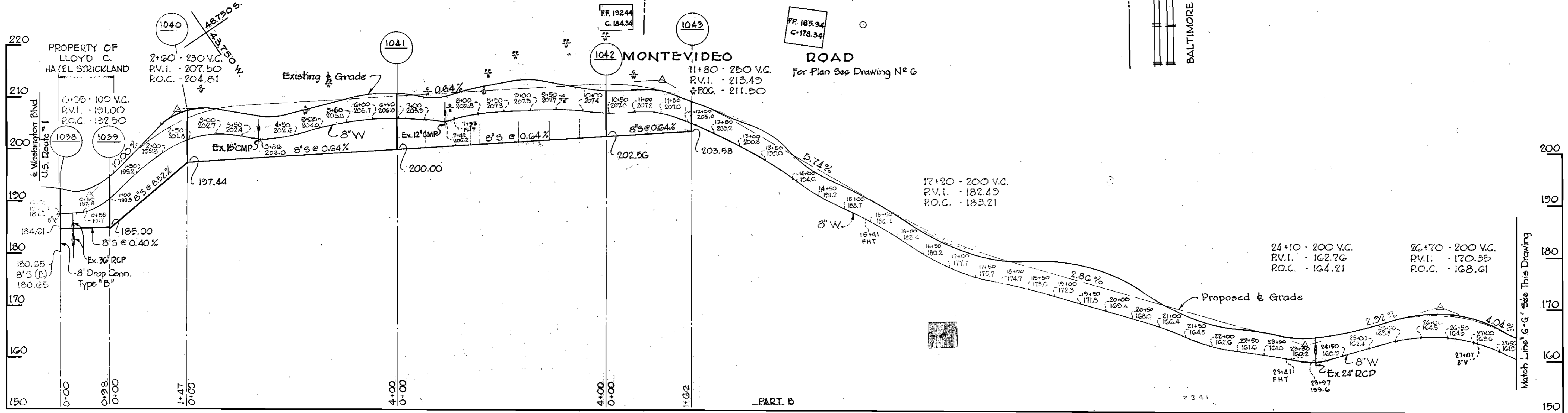
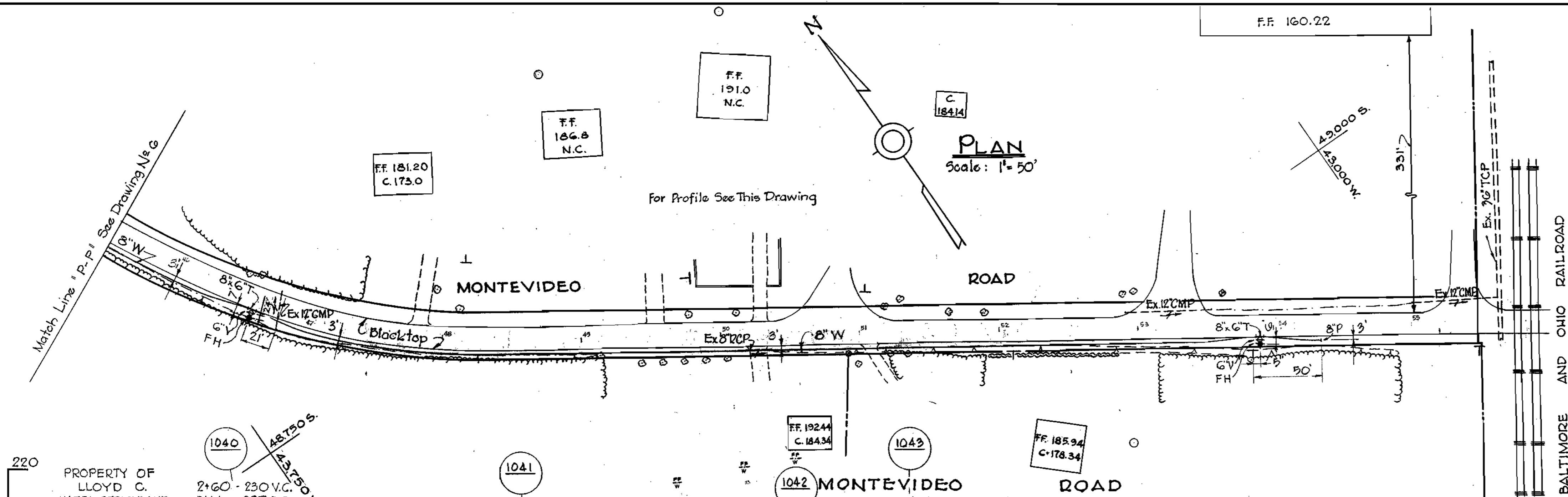
K. ELLIOTT CO., PITTSBURGH REORDER A-39070

GENERAL NOTES

1. Approximate location of existing mains are shown. The Contractor shall take all necessary precautions to protect the existing mains and services and maintain uninterrupted supply. Any damage incurred shall be repaired immediately.
2. All pipe elevations shown, are invert elevations.
3. The Contractor shall locate existing utilities a minimum of two weeks in advance of construction operations in vicinity of utilities.
4. The location of all valves, fittings etc. have been located in plan and dimensions shall be strictly adhered to unless otherwise directed by the Engineer in writing.
5. Bury Line elevation on Fire Hydrants shall be set the same as edge of paving or as directed by the Engineer in the field.
6. For all standard details see Standards found in Specifications.
7. Block all fittings with concrete. See Standard Details.
8. All 6" & 8" W to be Class 22 CIP, All 12" W to be Class 23, Water Mains to have a minimum of 3 1/2' cover unless otherwise noted.
9. Before digging pipe, pushing or doing other work near Telephone Cables call collect any time Lexington 9-9900 Ext. 553, 554 or 555, Baltimore, Maryland.
10. Clear all poles by 2'-0" minimum.
11. Cost for removing and replacing of guard rails shall be included in the unit price bid for excavation and backfill for water mains.
12. All sewers shall be V.C.P.X., C.S.P.X. or Asbestos Cement Class 2400 unless otherwise noted.

PLAN

Scale: 1" = 50'



PROFILE

Scale: H: V: = 10' : 10'

▲	10-25-C9	Drop House Connections Removed
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PART "B"
Contract No. 36-W45

WHITMAN, REQUARDT & ASSOCIATES
ENGINEERS
1304 ST. PAUL ST.
BALTIMORE, MARYLAND

HOWARD COUNTY METROPOLITAN COMMISSION
March 24, 1961
DATE
Carl W. Meyer
CHIEF ENGINEER

CONTRACT NO. 36-W45

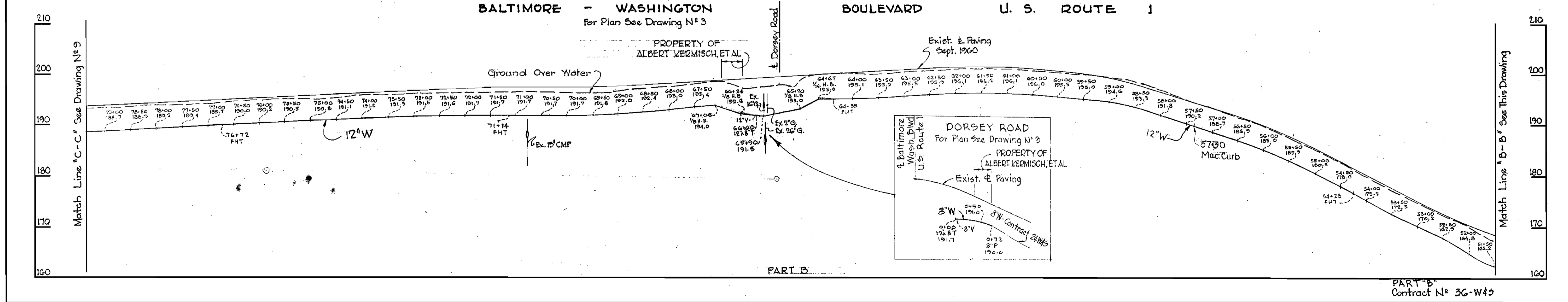
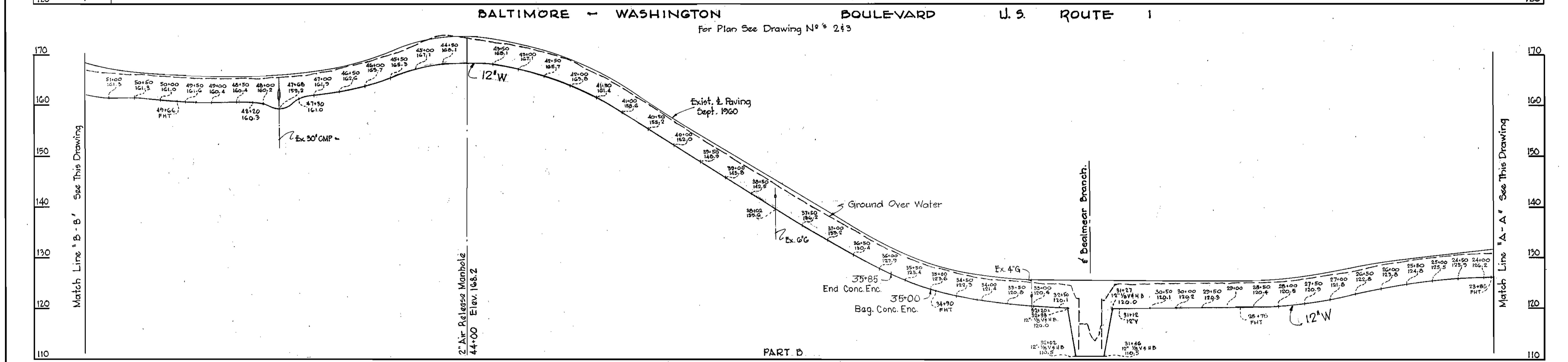
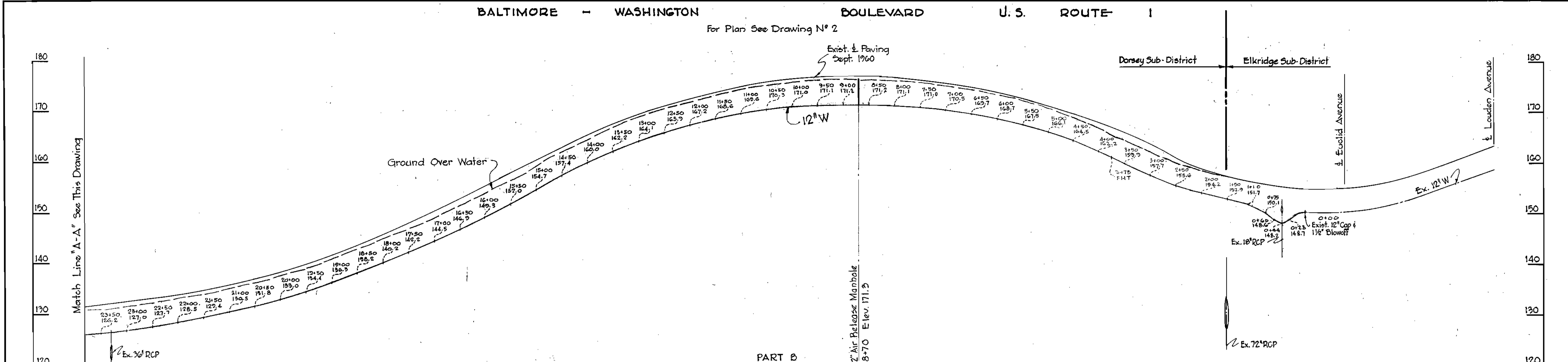
PLAN AND PROFILES OF
WATER & SEWER MAINS

DORSEY SUB - DISTRICT

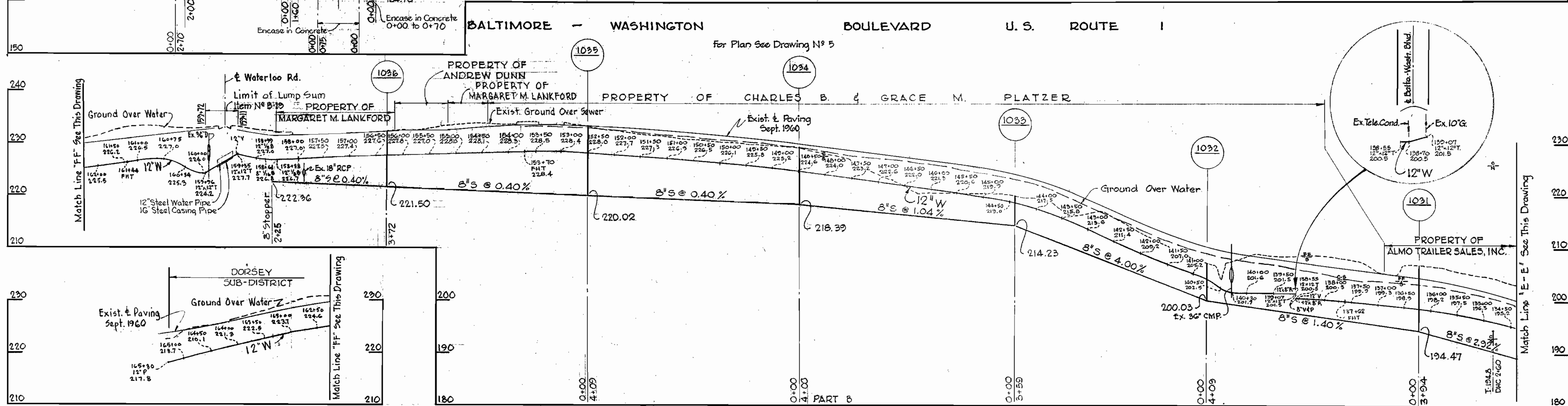
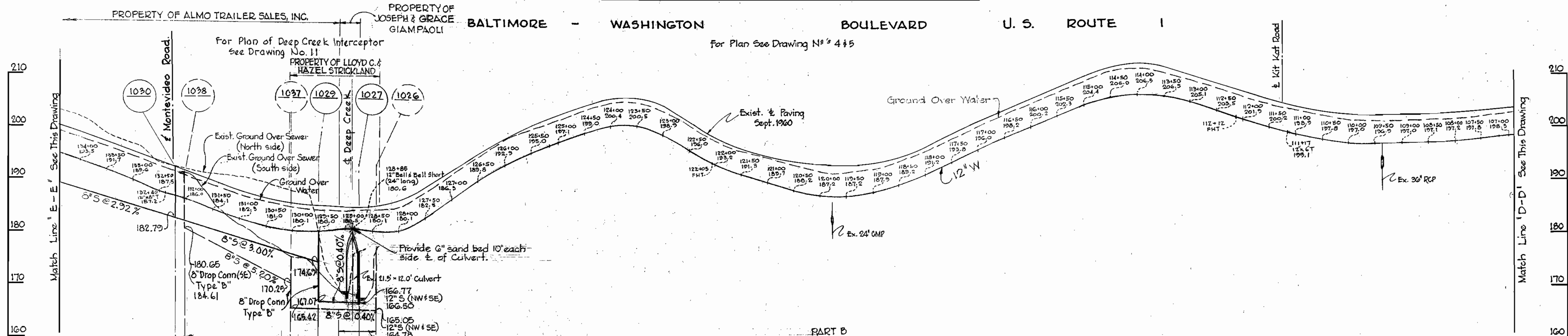
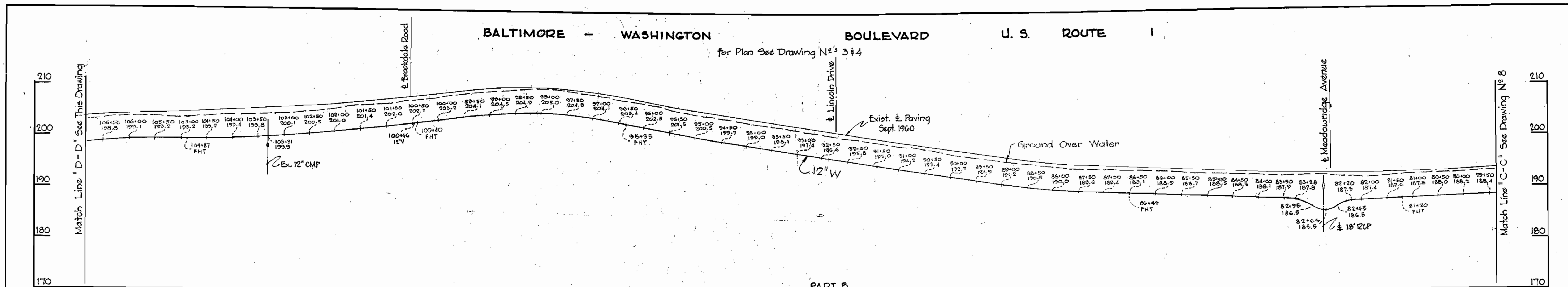
DRAWING NO. 7 OF 14 SCALE AS SHOWN

WS 36 WS/7

WS 36 W-5 / 8



WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND	HOWARD COUNTY METROPOLITAN COMMISSION March 15, 1961 DATE <i>Carl W. Meyer</i> CHIEF ENGINEER	CONTRACT NO. 36-W&S	PROFILES OF WATER MAINS	DORSEY SUB - DISTRICT	DRAWING NO. 8 OF 14 SCALE H: 1"=100' V: 1"=10'
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WHITMAN, REQUARDT & ASSOCIATES
ENGINEERS
1304 ST. PAUL ST.
BALTIMORE, MARYLAND

HOWARD COUNTY METROPOLITAN COMMISSION
March 24, 1961
DATE

CONTRACT NO. 36-W&S

PROFILES OF
WATER & SEWER MAINS

DORSEY SUB - DISTRICT

DRAWING NO. 9
OF 13

SCALE
H: 1"=100'
V: 1"=10'

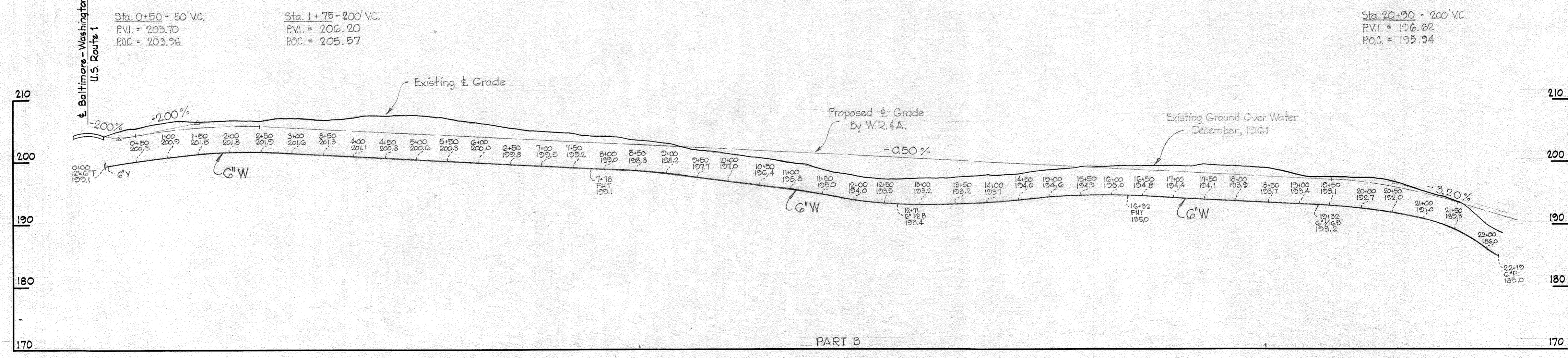
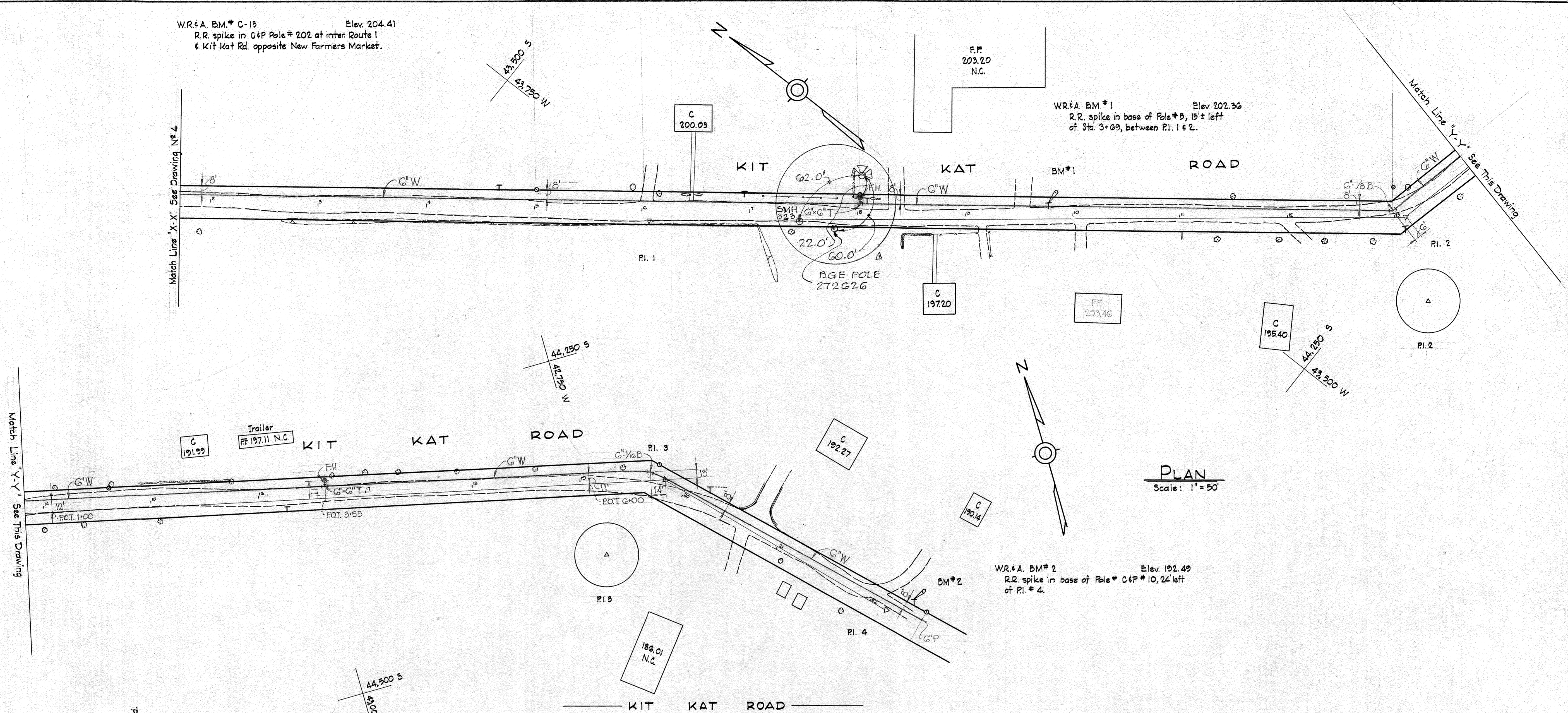
WS 36W&S/9

WS 36 WS-10

W.R.&A. B.M.* C-13 Elev. 204.41
 R.R. spike in C&P Pole # 202 at inter Route 1
 & Kit Kat Rd. opposite New Farmers Market.

W.R.&A. B.M.* 1 Elev. 202.36
 R.R. spike in base of Pole # 5, 15'± left
 of Sta. 3+00, between P.I. 1 & 2.

W.R.&A. B.M.* 2 Elev. 192.49
 R.R. spike in base of Pole # C&P # 10, 24'
 left of P.I. # 4.

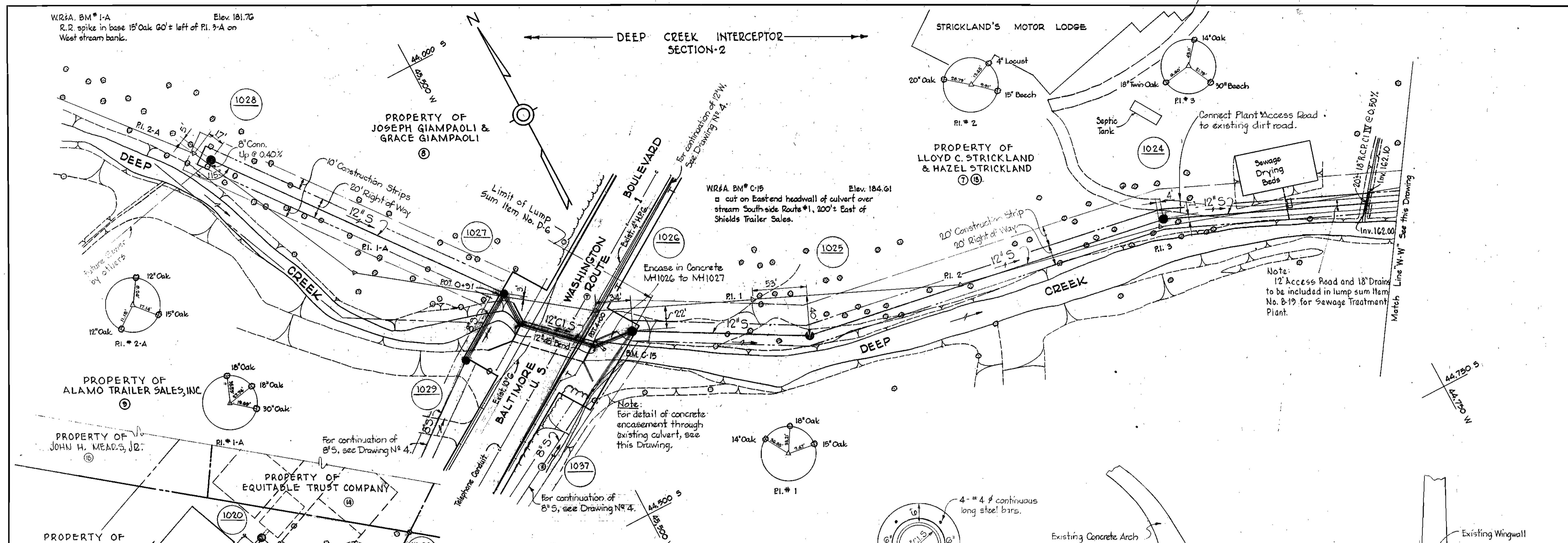


PROFILE
 Scale: H: 1" = 100'
 V: 1" = 10'

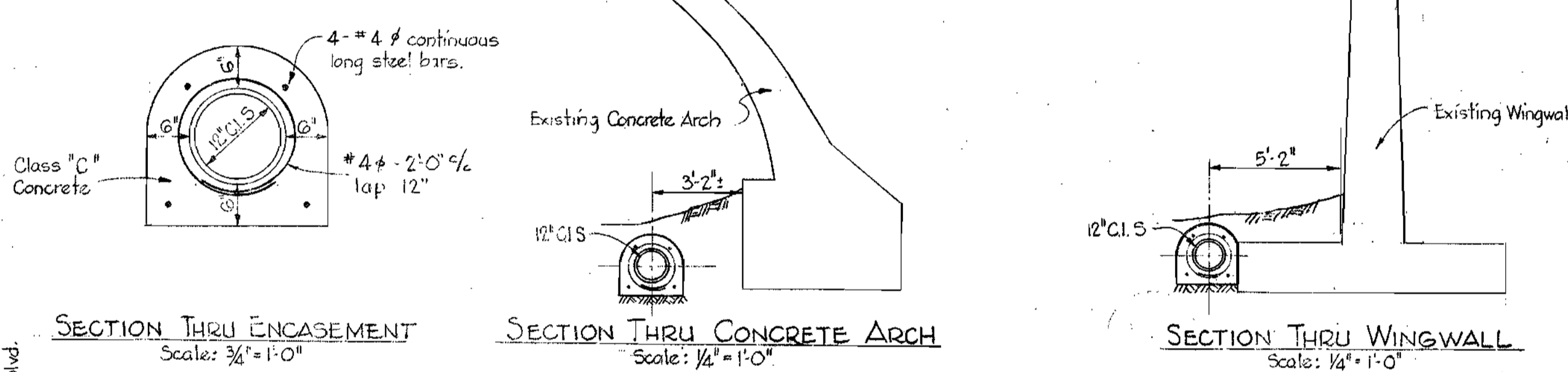
PART 'B'
 Contract N° 36W45

WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND	HOWARD COUNTY METROPOLITAN COMMISSION DATE _____ CHIEF ENGINEER _____	CONTRACT NO. 36-W45	PLAN AND PROFILES OF WATER MAINS	DORSEY SUB-DISTRICT	DRAWING NO. 10 OF 14 SCALE AS SHOWN 44 SW 29 430
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AS BUILT Feb 24, 1966
 W.R.A. AS BUILT 03/17/1963
 FB. 2555



PLAN
Scale: 1" = 50'

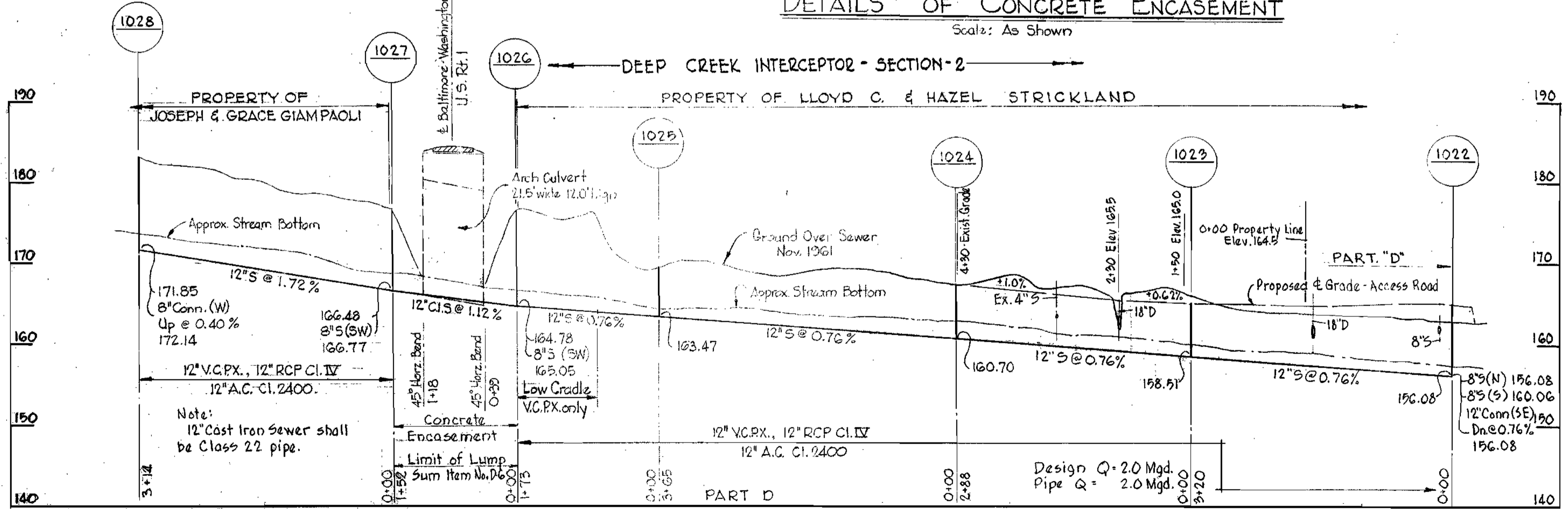


SECTION THRU ENCASEMENT
Scale: 3/4" = 1'-0"

SECTION THRU CONCRETE ARCH
Scale: 1/4" = 1'-0"

SECTION THRU WINGWALL
Scale: 1/4" = 1'-0"

DETAILS OF CONCRETE ENCASEMENT
Scale: As Shown



PROFILE
Scale: 1/4" = 1'-0"

Note:
For Grading Plan and Details of
Treatment Plant; Lump Sum Item
No. B-10, See Drawings No. 12, 13 & 14.
12" S, MH 1022 & MH 1023 not included in
lump sum for Treatment Plant.

WR&A BM#1
R.R. spike in base of 24" Replar 30' ± Rt. of
Pl. #4 on top stream bank.

PART "D"
Contract N° 36 W&S

WHITMAN, REQUARDT & ASSOCIATES
ENGINEERS
1304 ST. PAUL ST.
BALTIMORE, MARYLAND

HOWARD COUNTY METROPOLITAN COMMISSION
Dec. 1, 1961
DATE

CONTRACT NO. 36 W & S

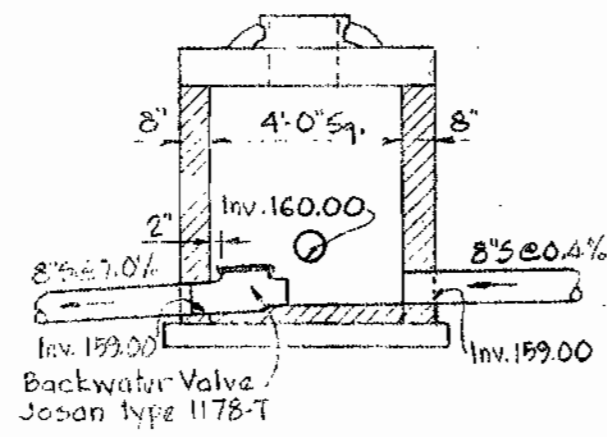
**PLAN AND PROFILES OF
SEWER MAINS**

DORSEY SUB - DISTRICT

DRAWING NO. 11 OF 14 SCALE AS SHOWN

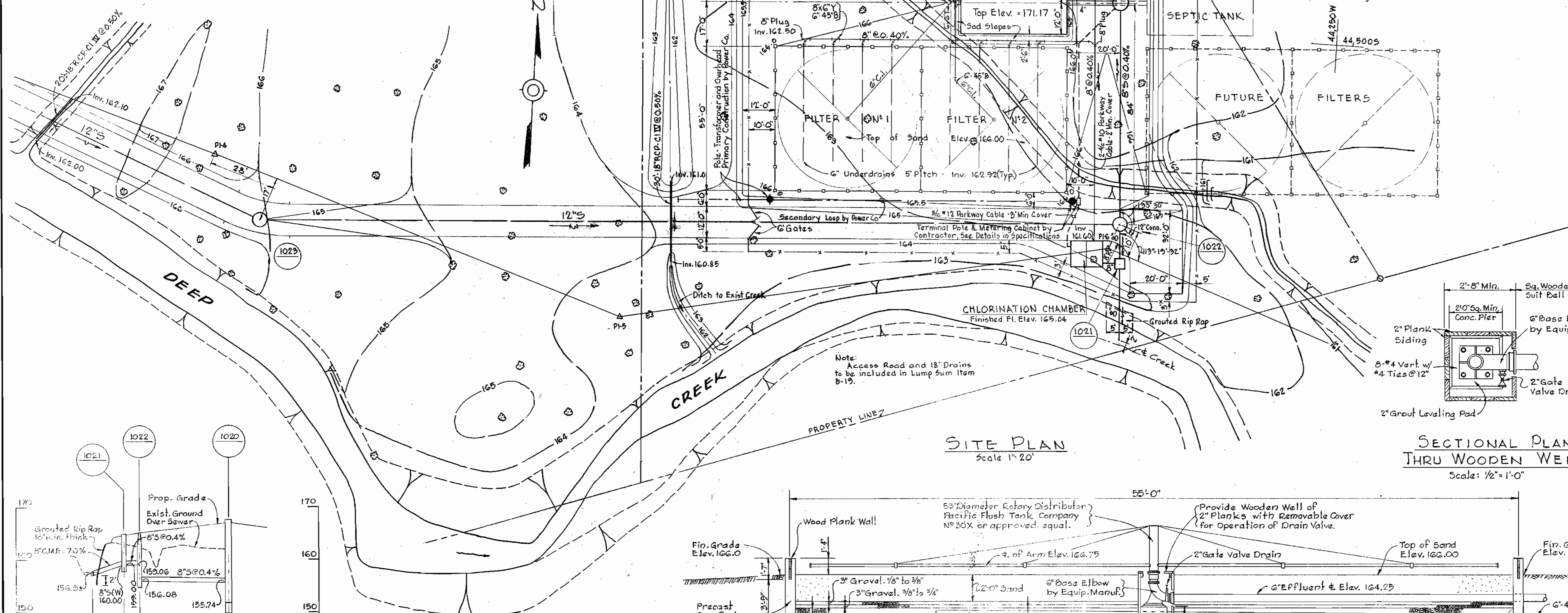
WS 36 W-S/11

Note:
Typical Shallow Type Manhole -
See Standard Detail 5-3



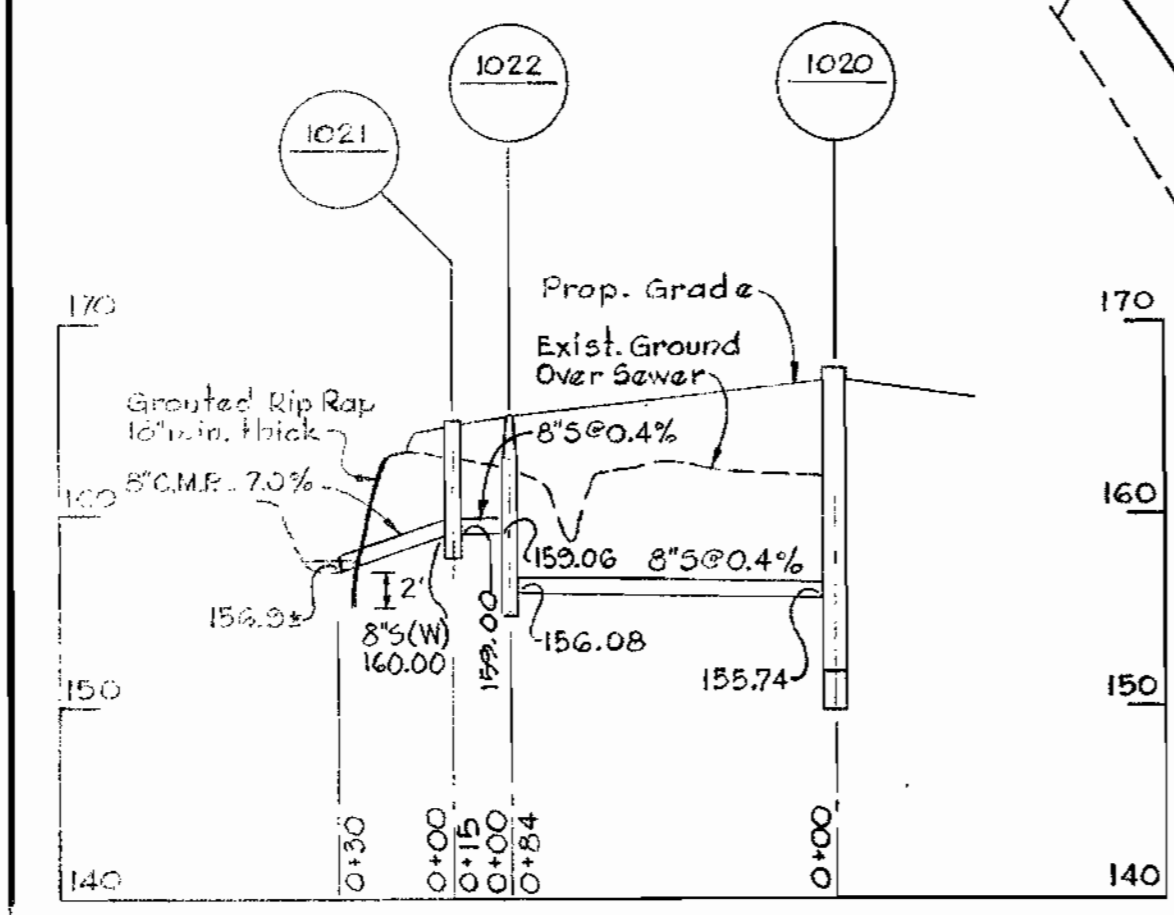
SECTION MH 1021
Scale 1/2" = 1'-0"

NOTE
All work shown on Site Plan
except 12" Sewer, Manholes 1022 &
1023 to be included in Lump Sum
Item B-19 for Sewage Treatment
Plant.



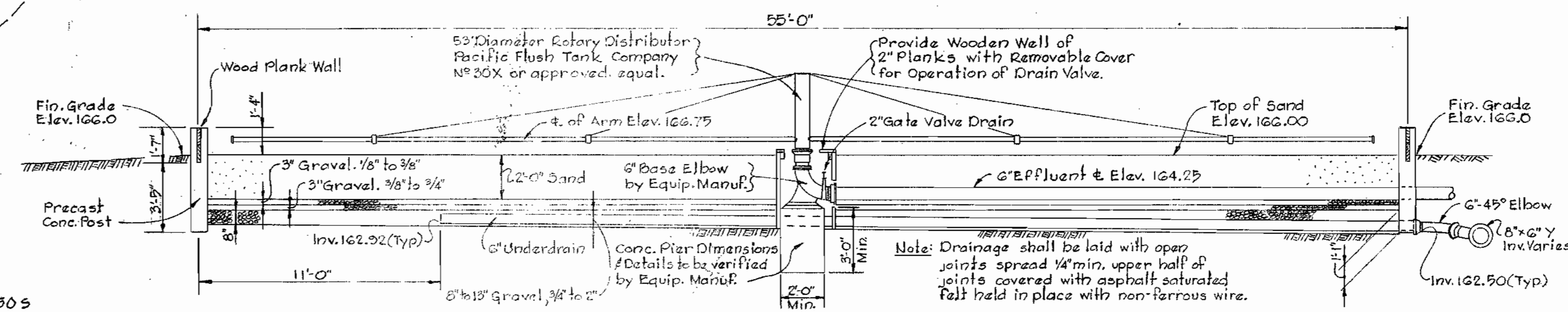
SITE PLAN
Scale 1" = 20'

SECTIONAL PLAN
THRU WOODEN WELL
Scale: 1/2" = 1'-0"

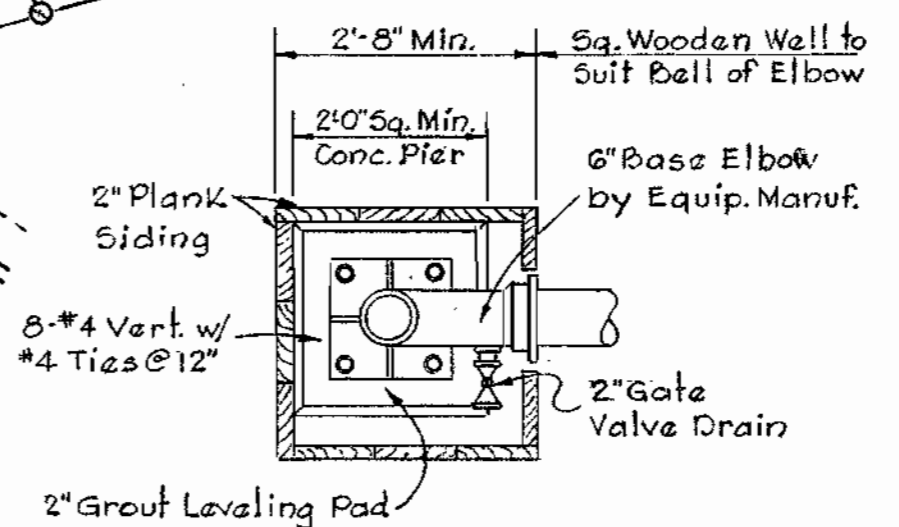


PROFILE
Scale: H: 1" = 50'
V: 1" = 10'

LEGEND
— 166 — Existing Contours
— 166 — Proposed Contours
- - - Proposed Fence
- - - Property Line



SECTION - SAND FILTER BED
Scale: 1/4" = 1'-0"



SECTIONAL PLAN
THRU WOODEN WELL
Scale: 1/2" = 1'-0"

WHITMAN, REQUARDT & ASSOCIATES
ENGINEERS
1304 ST. PAUL ST.
BALTIMORE, MARYLAND

HOWARD COUNTY METROPOLITAN COMMISSION
May 2, 1963
DATE
Carl W. Meyer
CHIEF ENGINEER

CONTRACT NO. 36 W&S

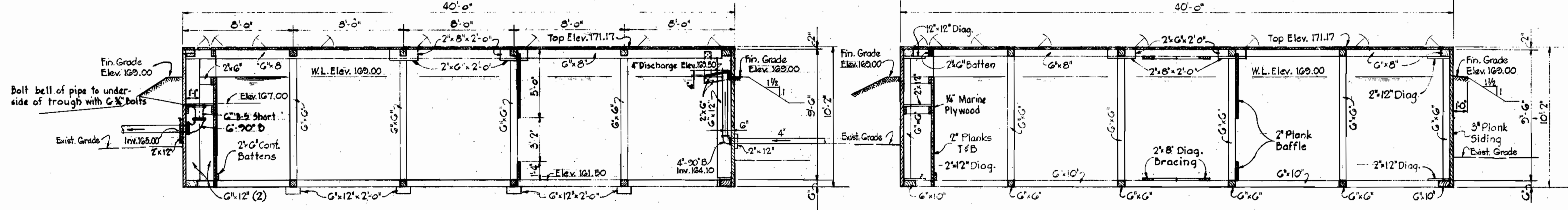
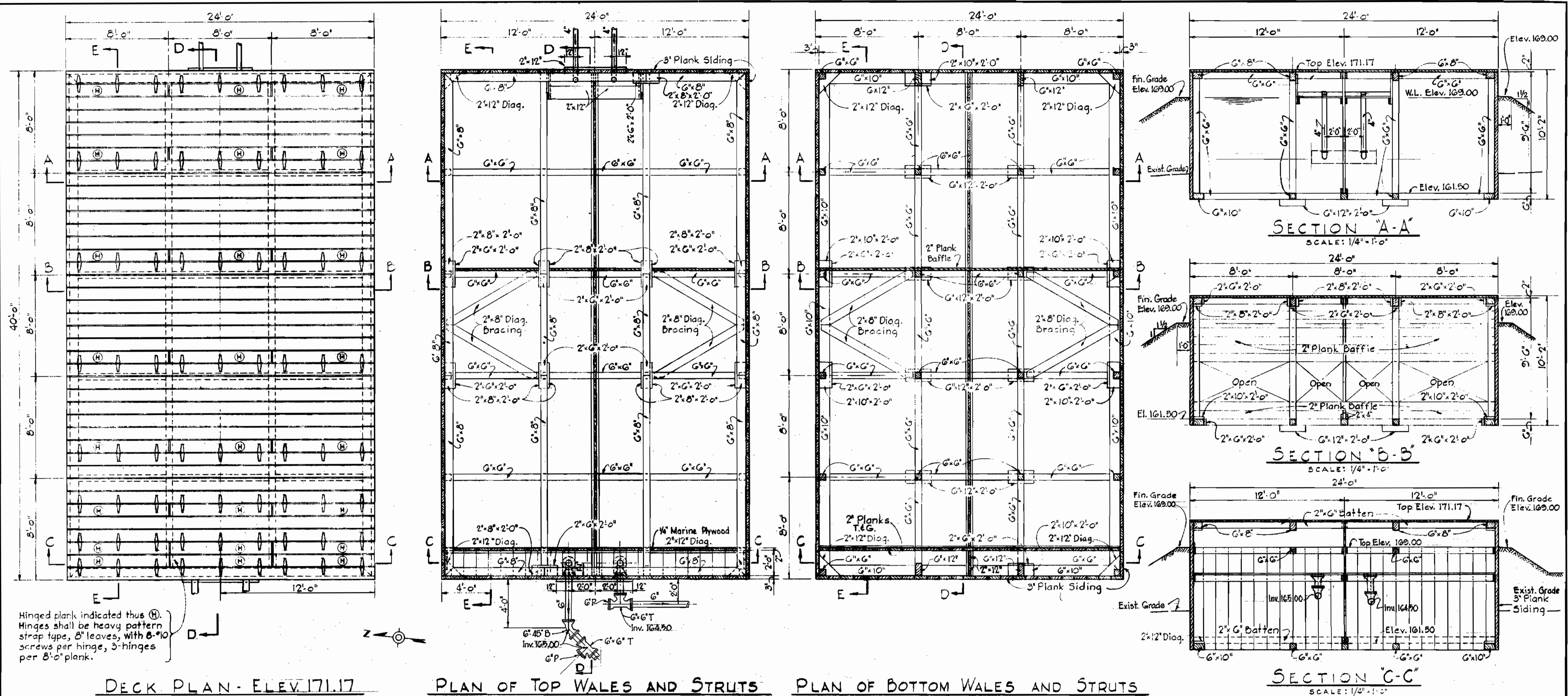
SEWAGE TREATMENT PLANT
SITE PLAN & DETAILS

DORSEY SUB-DISTRICT

DRAWING
NO. 12
OF 14

PART "B"
Contract No. 36 W&S
SCALE
AS
SHOWN

WS 36 W&S/12



SEPTIC TANK DETAILS

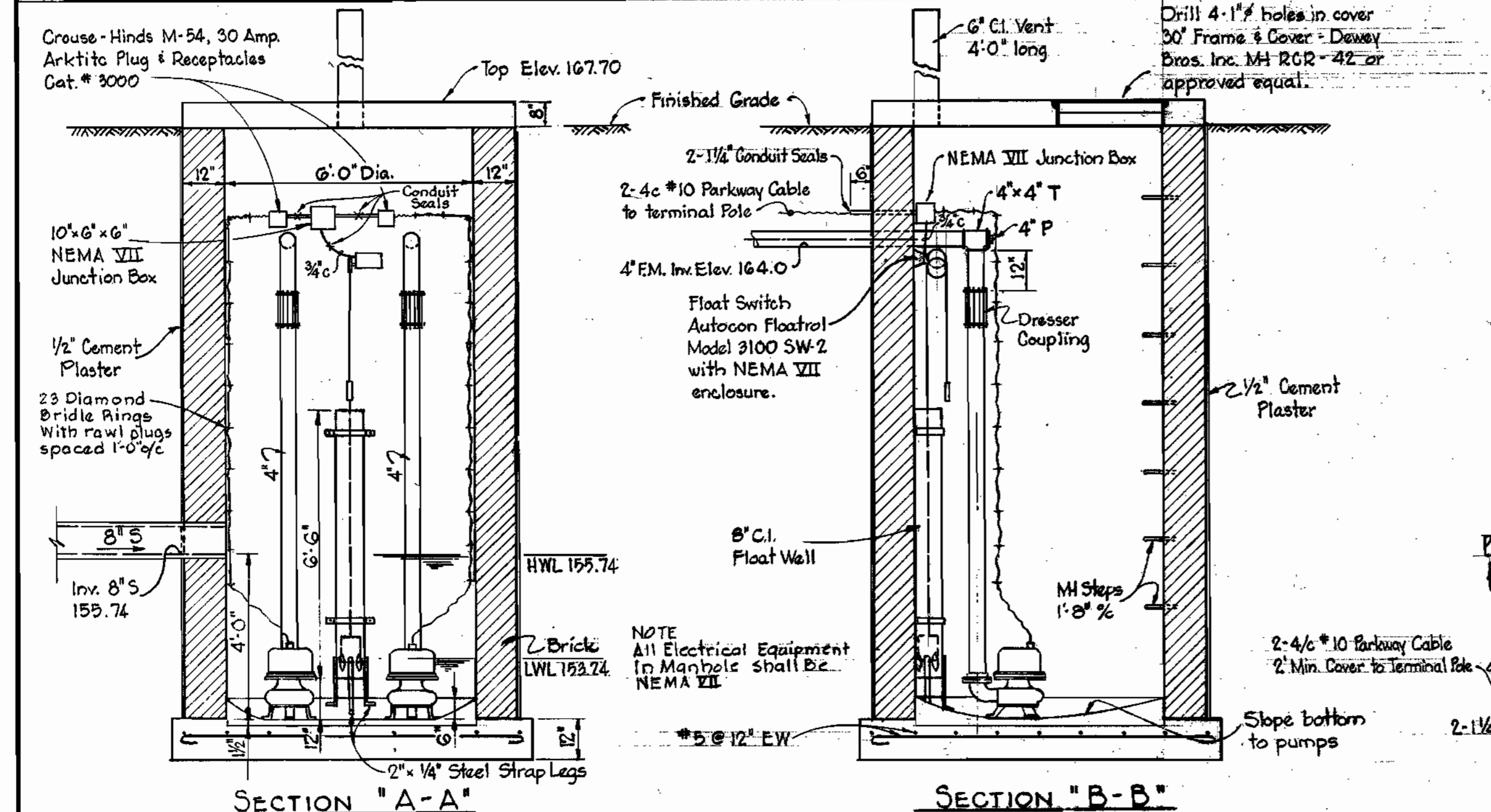
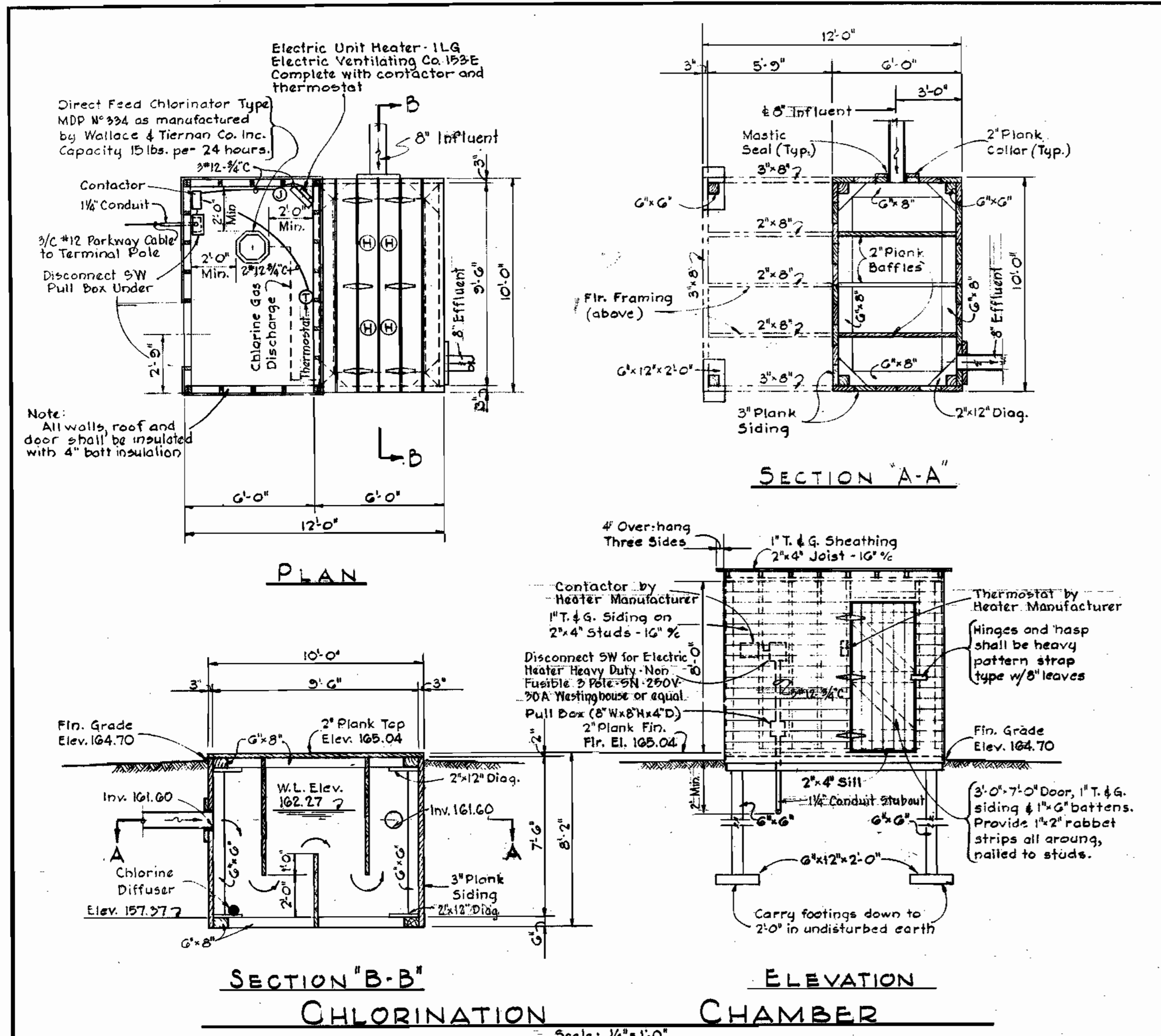
PART "B"
Contract No. 36 W&S

<p>WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND</p>	<p>HOWARD COUNTY METROPOLITAN COMMISSION Jan. 17, 1962 DATE</p>	<p>CONTRACT NO. 36 W&S</p>	<p>SEWAGE TREATMENT PLANT DETAILS</p>	<p>DORSEY SUB-DISTRICT</p>	<p>DRAWING NO. 13 OF 14</p>	<p>SCALE AS SHOWN</p>
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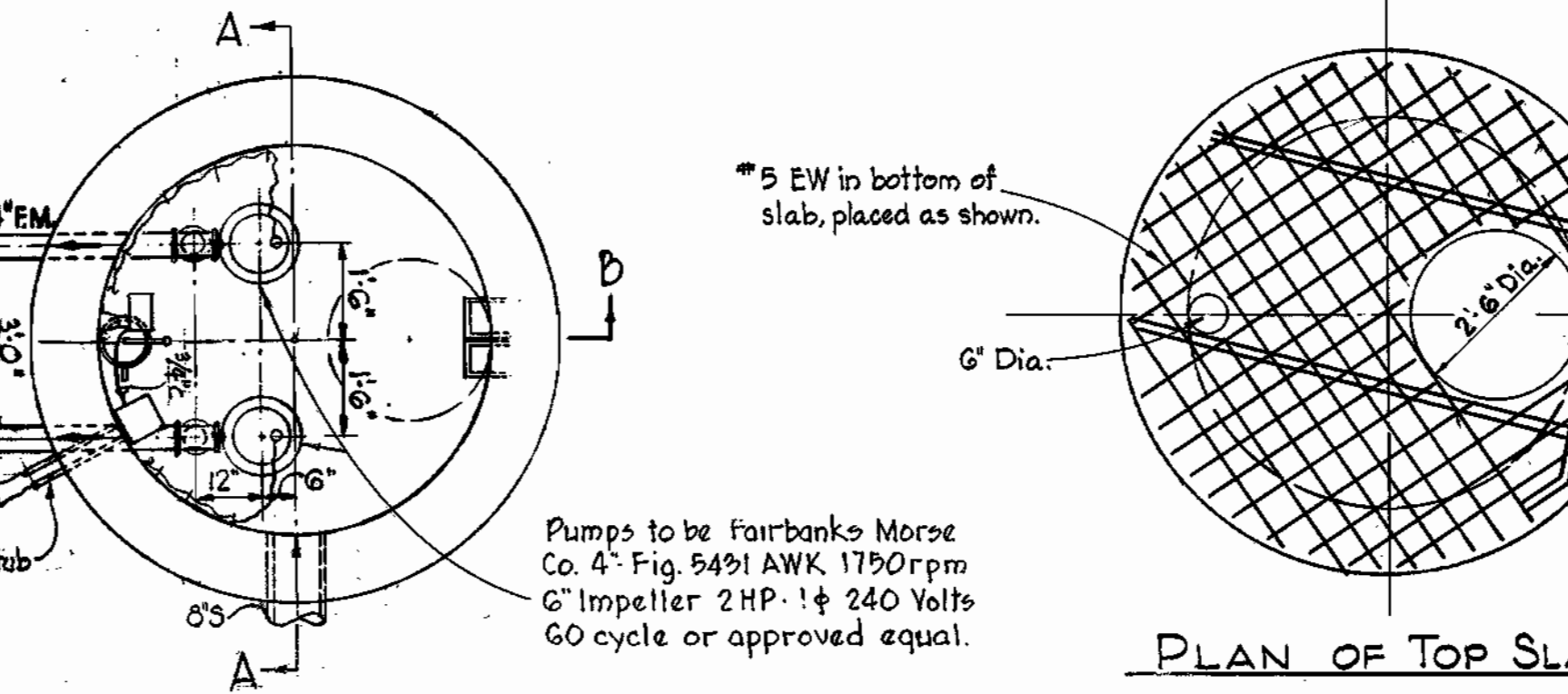
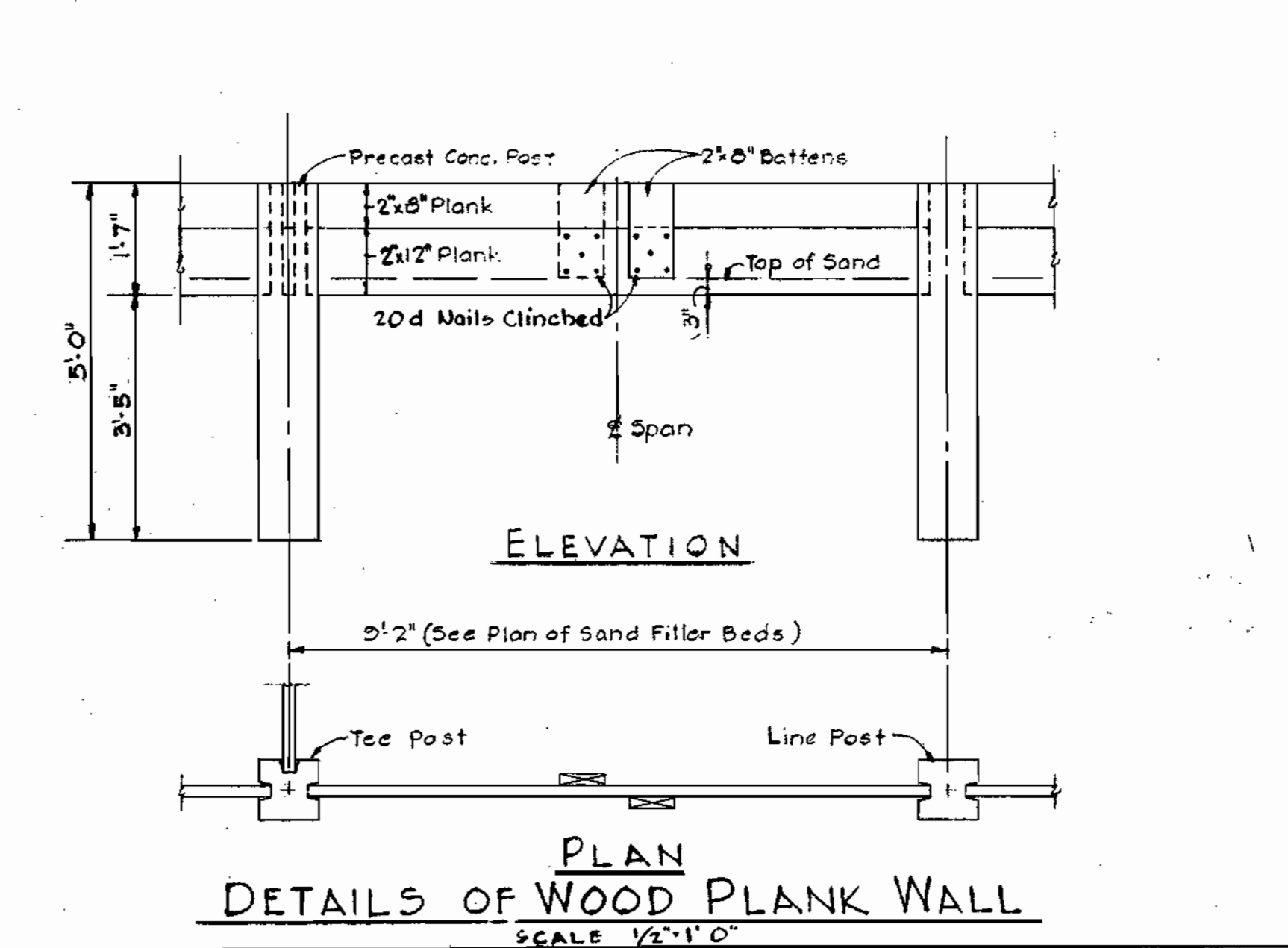
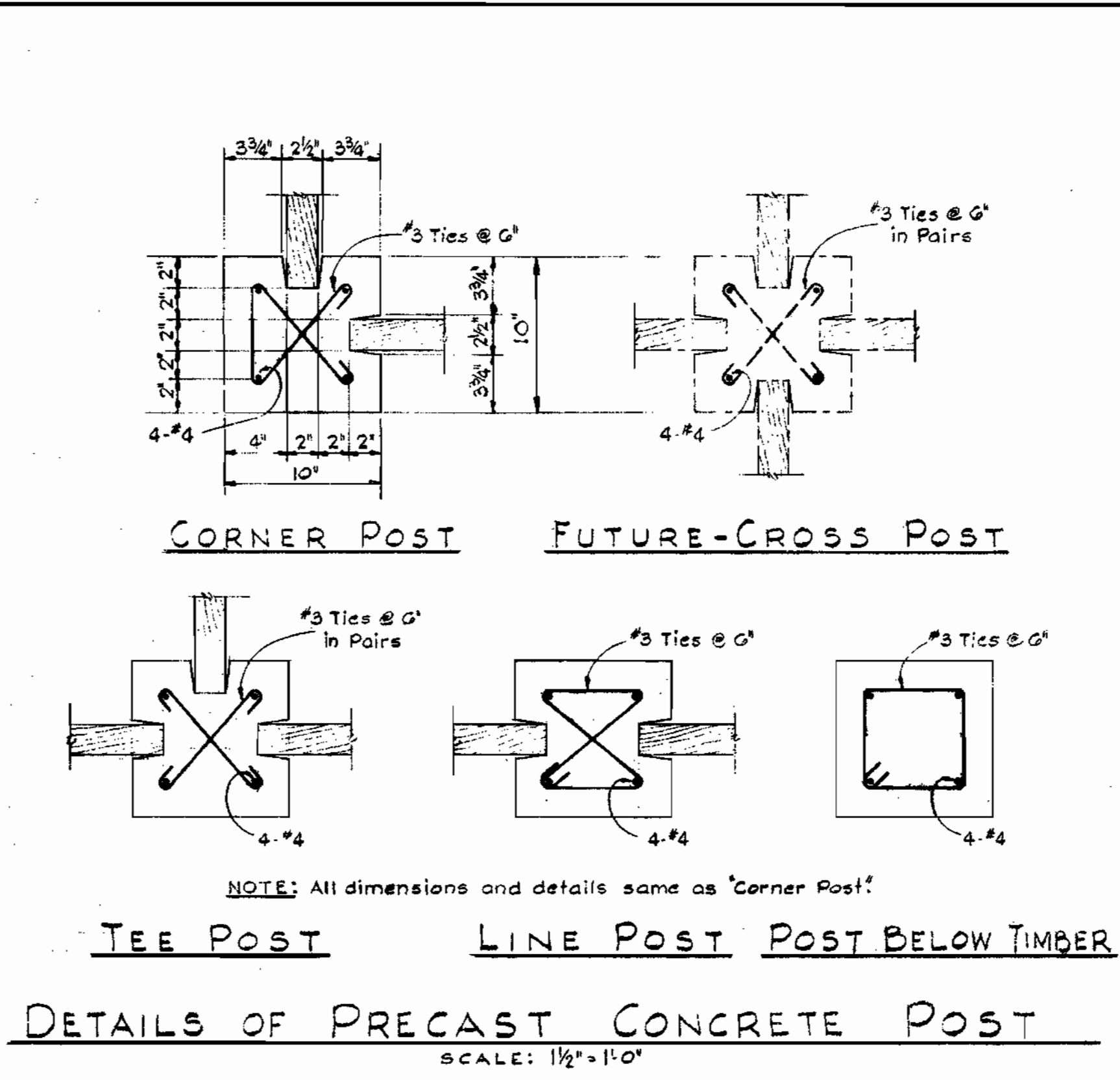
W.O. 5105-2

Feb. 24, 1966

WS 36 W-5/13



DETAILS OF SPECIAL MANHOLE No. 1020
Scale: 3/8" = 1'-0"



GENERAL NOTES

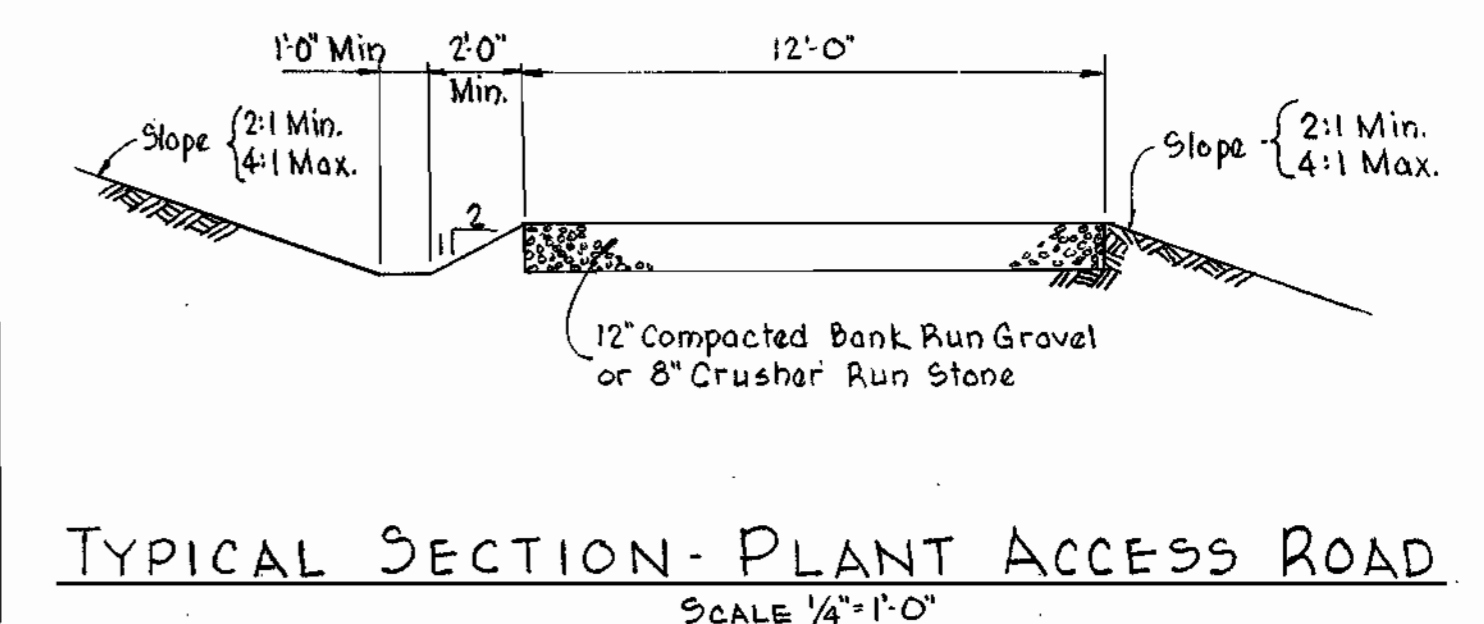
- TREATMENT FACILITIES:**
- Contractor shall strip and store the top soil, from all disturbed areas within the fence area. Upon completion of construction, the contractor shall distribute uniformly the top soil, and sod all disturbed areas within the fence area and all disturbed slopes where noted.
 - Pump discharge piping shall be galvanized steel, ASTM A 120 Schedule 40, galvanized, fittings shall be malleable iron, ASA B16C-1932 Class 150.
 - Septic Tank effluent piping shall be cast iron mechanical joint, Class 22.
- SEPTIC TANK:**
- Wood planking for deck, sides, baffles, trough, etc., may be rough sawn undressed oak, pine or fir. Wales, struts, posts, beams, etc., may be rough sawn or dressed at option of contractor.
 - Deck planking shall be 2"x12", 1/2" space between plank, see Note Sheet #10.
 - Side, baffle and trough planking shall be battled tight, and may vary from 6" to 12" in width.
 - Side planking shall be fastened with 2-40d nails per plank at top and bottom wales.
 - Baffle and trough planking shall be securely fastened in place. Provide battens, brackets, etc., of 2" lumber as required.
 - Wales, struts, posts, beams, etc., shall be neatly fitted at bearing points, and shall be securely fastened in place.
- CHLORINATION CHAMBER:**
- All wood planking shall be as specified under septic tank notes.
 - Roof to overhang 1'-0" on door side.
 - Roof to chlorine shed shall be covered with 2-ply tar paper laid in hot tar. All laps shall be nailed, and a hot tar mep coat applied over the covering.
 - Sides and roof of chlorine shed shall be of No. 2 common dressed pine or fir.
- SAND FILTER BED:**
- Wood plank walls shall be as specified under septic tank notes.
 - Sand for filter bed shall have an effective size of 0.5-0.6 mm. and a uniformity coefficient of 1.75 max.

DESIGN DATA

POPULATION CAPACITY
200 Houses at 2 persons per house = 400 persons (300 persons present)

SEWAGE QUANTITY
600 person at 90 gal./capita/day = 54,000 gal./day (375 g.p.m.) (Present 47,000 gal./day)

Volume Septic Tank = 33,800 gal.
Volume Chlorine Tank = 2,252 gal.
Detention Time at 37.5 g.p.m. = 60 min.
Sand Filter Bed Area = 12,100 S.F. (Present 6,000 S.F.)



WHITMAN, REQUARDT & ASSOCIATES ENGINEERS 1304 ST. PAUL ST. BALTIMORE, MARYLAND	HOWARD COUNTY METROPOLITAN COMMISSION Jan. 17, 1962 DATE	CONTRACT NO. 36 W&S CHIEF ENGINEER	SEWAGE TREATMENT PLANT DETAILS	DORSEY SUB-DISTRICT	PART "B" Contract No. 36 W&S
					DRAWING NO. 14 OF 15

WS 36 W-S/14